Amendments to the Claims

- 1. (Canceled)
- 2. (Canceled)
- 3. (Currently Amended) The composition of claim <u>62</u> wherein: the saturated diacid is selected from diacids compatible with fumaric acid and poly(propylene fumarate).
- 4. (Original) The composition of claim 3 wherein:
 the saturated diacid is selected from succinic acid, glutaric acid, adipic acid, pimelic acid, suberic acid, azelaic acid, sebacic acid and mixtures thereof.
- 5. (Canceled)
- 6. (Currently Amended) A composition comprising:

a macromer prepared by reacting an unsaturated diacid having a carbon-carbon double bond and a saturated diacid, wherein the unsaturated diacid having a carbon-carbon double bond is fumaric acid; and

a bioactive ceramic grafted to the macromer, wherein the bioactive ceramic is hydroxyapatite grafted to the macromer by way of silicate groups.

The composition of claim 5 wherein:

the hydroxyapatite is grafted to the macromer by way of silicate groups.

7. (Currently Amended) A composition comprising:

a macromer prepared by reacting an unsaturated diacid having a carbon-carbon double bond, a saturated diacid and a silane coupling agent; and a bioactive ceramic grafted to the macromer.

The composition of claim 1 wherein:

the macromer is prepared by reacting the unsaturated diacid having a carbon-carbon double bond, the saturated diacid, and a silane coupling agent.

8. (Original) The composition of claim 7 wherein:

the unsaturated diacid having a carbon-carbon double bond is fumaric acid, the saturated diacid is selected from diacids compatible with fumaric acid and poly(propylene fumarate), and

the silane coupling agent is a dihalodialkylsilane.

9. (Original) The composition of claim 8 wherein:

the saturated diacid is selected from succinic acid, glutaric acid, adipic acid, pimelic acid, suberic acid, azelaic acid, sebacic acid and mixtures thereof.

10. (Original) The composition of claim 7 wherein:

the macromer is prepared by reacting the unsaturated diacid having a carbon-carbon double bond, the saturated diacid, the silane coupling agent, and an ester of the saturated diacid.

11. (Original) The composition of claim 10 wherein:

the saturated diacid is adipic acid,

the silane coupling agent is a dichlorodimethylsilane, and the ester is a monomethyl ester of adipic acid. 12. (Original) The composition of claim 10 wherein:

the bioactive ceramic comprises hydroxyapatite particles having a particle size of less than 10,000 nanometers.

13. (Original) A composition comprising:

a macromer including silane units, units derived from an unsaturated diacid having a carbon-carbon double bond, and units derived from a saturated diacid; and a bioactive ceramic grafted to the macromer.

14. (Original) The composition of claim 13 wherein:

the macromer includes silane units, fumarate units, and units derived from a saturated diacid, and

the bioactive ceramic is hydroxyapatite.

15. (Original) The composition of claim 13 wherein:

the macromer includes silane units, fumarate units, and adipate units, and the bioactive ceramic is hydroxyapatite.

16. (Original) The composition of claim 13 wherein:

the bioactive ceramic is hydroxyapatite.

17. (Original) The composition of claim 16 wherein:

the hydroxyapatite is grafted to the macromer by way of silicate groups.

- 18. (canceled)
- 19. (canceled)
- 20. (canceled)
- 21. (canceled)
- 22. (canceled)

23. (canceled) 24. (canceled) 25. (canceled) 26. (Currently Amended) A biodegradable composite comprising: (a) a polymeric matrix; and (b) the composition of claim 61 crosslinked to the matrix. 27. (Original) The composite of claim 26 wherein: the matrix has a carbon-carbon double bond. 28. (Original) The composite of claim 27 wherein: the matrix comprises poly(propylene fumarate). 29. (Original) The composite of claim 26 wherein: the composite is suitable as a scaffold for tissue regeneration. 30. (Original) The composite of claim 29 wherein: the tissue is bone. 31. (Currently Amended) A crosslinkable, biodegradable material comprising: a polymer having a carbon-carbon double bond; the composition of claim 61, and a crosslinking agent for crosslinking the polymer and the composition. 32. (Original) The material of claim 31 wherein: the polymer comprises poly(propylene fumarate).

33. (Currently Amended) The material of claim 32 wherein:

the crosslinking agent is a free radical intitiatorinitiator.